

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

lication of:

Kenneth E. PALMER, et al.

Appl. No.: 10/038,001

Filed: December 20, 2001

For: ROLLING CIRCLE REPLICON

EXPRESSION VECTORS

Art Unit: 1636 -

Examiner: Not Yet Assigned

Atty. Docket: 00801.0179.CPUS

Information Disclosure Statement

Commissioner for Patents Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited

Applicant: Palmer, e tal. Appl. No.: 10/038,001

by or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

Applicants have checked the appropriate boxes below.

- 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No statement under 37 C.F.R. § 1.97(e) or fee is required, or
- □ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance, or action that otherwise closes prosecution in the application, and
 - □ a. I hereby state that each item of information contained in this Information

 Disclosure Statement was cited in any communication from a foreign

 patent office in a counterpart foreign application not more than three

 months prior to the filing of this Information Disclosure Statement. 37

 C.F.R. § 1.97(e)(1), or
 - □ b. I hereby state that no item of information in this Information Disclosure Statement was cited in any communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2), or
 - □ c. Attached is our Check No. _____ in the amount of \$ ____ in payment of the fee under 37 C.F.R. § 1.17(p).
- □ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but on or before payment of the Issue Fee. Attached is our Check No.

 _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(i), and

Applicant: Palmer, e tal. Appl. No.: 10/038,001

- □ a. I hereby state that each item of information contained in this Information

 Disclosure Statement was cited in any communication from a foreign

 patent office in a counterpart foreign application not more than three

 months prior to the filing of this Information Disclosure Statement. 37

 C.F.R. § 1.97(e)(1), or
- □ b. I hereby state that no item of information in this Information Disclosure Statement was cited in any communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- □ 4. Relevance of the non-English language document(s) is discussed in the present specification.
- □ 5. The document(s) was/were cited in a corresponding foreign application. An English language version of the foreign search report is attached for the Examiner's information.
- □ 6. A concise explanation of the relevance of the non-English language document(s) appears below:
- 8. Copies of the documents marked with an asterisk were cited by or submitted to the Office in Application No. 09/505,477, filed February 16, 2000, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

Applicant: Palmer, e tal. Appl. No.: 10/038,001

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 08-3038 referencing docket number 00801.0179.CPUS01.

Respectfully submitted,

Date: June 21, 2002

Albert P. Halluin (Reg. No. 25,227) Robin C. Chiang (Reg. No. 46,619)

HOWREY SIMON ARNOLD & WHITE, LLP 301 Ravenswood Avenue Box No. 34 Menlo Park, CA 94025 (650) 463-8109



LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO FORM 1449

ATTY, DOCKET NO.	APPLICATION NO.				
00801.0179.CPUS01	10/038,001				
APPLICANT .					
PALMER, Kenneth E. and POGUE, Gregory P.					
FILING DATE	GROUP C				
December 20, 2001	1636				

U.S. PATENT DOCUMENTS *EXAMINER DOCUMENT NUMBER DATE SUBCLASS CLASS NAME INITIAL **FOREIGN PATENT DOCUMENTS** *EXAMINER CLASS SUBCLASS DOCUMENT NUMBER DATE COUNTRY TRANSLATION INITIAL YES NO WO 99/29871 06/17/99 PCT WO 99/49079 09/30/99 PCT Х WO 99/60140 11/25/99 PCT Χ **OTHER REFERENCES** (Including Author, Title, Date, Pertinent Pages, Etc.) Castellano, M., et al., "Initiation of DNA Replication in a Eukaryotic Rolling-circle Replicon: Identification of Multiple DNA-protein Complexes at the Geminivirus Origin," JMB Aticle No. 2916 (1999)Fire, et al., "Rolling replication of short DNA circles", Proceedings of the National Academy of Sciences of USA, National Academy of Science, 92(10):4641-4645 (1995), XP002112409 Gibbs, M., et al., "Evidence that a plant virus switched hosts to infect a vertebrate and then recombined with a vertebrate-infecting virus," Proc. Natl. Acad. Sci. USA 96:8022-8027 (1999) Hamel, A., et al., "Nucleotide Sequence of Porcine Circovirus Associated with Postweaning Multisystemic Wasting Syndrome in Pigs," J. Virology 72(6):5262-5267 (1998) Hanley-Bowdoin, L., et al., "Geminiviruses: Models for Plant DNA Replication, Transcription, and Cell Cycle Regulation," Critical Reviews in Plant Sciences 18(1):71-106 (1999) Lewin, "Replication Can Proceed Through Eyes, Rolling Circles, or D Loops," Genes, 4 Oxford, Oup, GB, 336-338 (1990), XP002041180 Mankertz, A., et al., "Identification of a protein essential for replication of porcine circovirus," J. Gen. Virol. 79:381-384 (1998) Mankertz, A., et al., "Mapping and Characterization of the Origin of DNA Replication of Porcine Circovirus," J. Virology 71(3):2562-2566

EXAMINER	DATE	CONSIDER

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



IST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO FORM 1449

- 1	ATTY. DOCKET NO. 00801.0179.CPUS01	APPLICATION NO. 10/038,001			
Ţ,	APPLICANT				
L	PALMER, Kenneth E. and POGUE, Gregory P.				
F	FILING DATE	GROUP			
H	December 20, 2001	1636			

···		
*	Mankertz, J., et al., "Transcription Analysis of Porcine Circovirus (PCV)," Virus Genes 16:3:267-276 (1998)	
*	ehan, B., et al., "Characterization of novel circovirus DNAs associated with wasting syndromes olgs," J. Gen. Virol. 79:2171-2179 (1998)	
*	Meehan, B., et al., "Sequence of porcine circovirus DNA: affinities with plant circoviruses," J. Gen. Virol. 78:221-227 (1997)	
*	* Mushahwar, I., et al., "Molecular and biophysical characterization of TT virus: Evidence for a new virus family infecting humans," <i>Proc. Natl. Acad. Sci. USA</i> <u>96</u> :3177-3182 (1999)	
* Orozco, B., et al., "Functional Domains of a Geminivirus Replication Protein," J. Biological Chemistry 272(15):9840-9846 (1997)		
*	Palmer, K. and Rybicki, E., The Molecular Biology of Mastreviruses," <i>Advances in Virus Reserach</i> 50:183-234 (1998)	
*	Palmer, K. and Rybicki, E., The use of geminiviruses in biotechnology and plant molecular biology, with particular focus on Mastreviruses," <i>Elsevier Plant Science</i> 129:115-130 (1997)	
*	Palmer, K., et al., "Generation of maize cell lines contaiing autonomously replicating maize streak virus-based gene vectors," Arch. Virol. 144:1345-1360 (1999)	
	Saunders, et al. "DNA Forms of the Geminivirus African Cassava Mosaic Virus Consistent with a Rolling circle Mechanism of Replication," <i>Nucleic Acids Research</i> 19(9):2325-2330 (1991) XP000204317	
*	Timmermans, M., et al., "Geminiviruses and Their Uses as Extrachromosomal Replicons," Annu. Rev. Plant Physiol Plant Mol. Biol. 45:79-112 (1994)	
	E C	
	CE	
	3	
 	16 20	

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with **MPEP 609**; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.